PTO/SB/21 (09-04)

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TRANSMITTAL FORM

Application Number 10/822,528 Filing Date April 12, 2004 First Named Inventor WANG, Daxiang 1621 Art Unit Examiner Name PARSA, Jafar F.

(to be used for all correspondence after initial filing) Total Number of Pages in This Submission Attorney Docket Number 1856-17802 (9407.A-01)

ENCLOSURES (check all that apply)									
Fee Transmittal Form	☐ Drawing(s)	After Allowance Communication to Group							
☐ Fee Attached	☐ Licensing-related Papers	Appeal Communication to Board of Appeals and Interferences							
☐ Amendment/Reply	Petition								
☐ After Final ☐ Affidavits/declaration(s) ☐ Extension of Time Request ☐ Express Abandonment Request ☐ Information Disclosure Statement ☐ Certified Copy of Priority Document(s) ☐ Response to Missing Parts/ Incomplete Application ☐ Response to Missing Parts	 □ Petition to Convert to a Provisional Application □ Power of Attorney, Revocation Change of Correspondence Address □ Terminal Disclaimer □ Request for Refund □ CD, Number of CD(s) □ Landscape Table on CD 	 □ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) □ Proprietary Information □ Status Letter ☑ Other Enclosure(s) (please identify below): Form PTO-1449; acknowledgment postcard 							
under 37 CFR 1.52 or 1.53	Remarks	* ,							
SIGNATURE O	F APPLICANT, ATTORNEY,	OR AGENT							
Firm CONLEY ROSE, P. C. Signature Printed name Jeffrey L. Johnson									
Date April 18, 200	Reg. N	eg. No. 53,078							
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I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.									
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Signature ()	Date Date	April 18, 2005							

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

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APR I	Effective on 12/08/04.		Complete if Known			
یر	Fees partuant to the Consolidated Appropriation		Application Number	10/822,528		
ENT & TI	FEE TRANSMI	IIAL	Filing Date	April 12, 2004		
	For FY 200	5	First Named Inventor	WANG, Daxiang		
			Examiner Name	PARSA, Jafar F.		
	Applicant claims small entity status. Se	ee 37 CFR 1.27	Art Unit	1621		
	TOTAL AMOUNT OF PAYMENT	(\$)180.00	Attorney Docket No.	1856-17802 (9407.A-01)		
Ì	METHOD OF PAYMENT (check all that app	lv)				

METHOD OF PAYMENT (check all that apply)									
Check Credit Card Money Order Other (please identify):									
Deposit Account Deposit Account Number:: 03-2769 Deposit Account Name: Conley Rose, P.C.									
For the above-i	identified de	eposit account, the	Director is h	ereby autho	rized to: (check all tha	at apply)			
Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee									
Charge any additional fee(s) or underpayments of fee(s) Credit any overpayments under 37 CFR 1.16 and 1.17									
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FEE CALCULATION									
1. BASIC FILING, SEAR	•			CU EEEC	-VAI	MINIATION FEEC			
Application Type	FILING FI			CH FEES		MINATION FEES	Food Boid (\$)		
Application Type	<u>ree (\$)</u>	Small Entity Fee (\$)	<u>Fee (\$</u>	S) <u>Small I</u> Fee		Fee (\$)	Fees Paid (\$)		
Utility	300	150	500	25	20	0 100			
Design	200	100	100	5	130	0 65			
Plant	200	100	300	15) 16	0 80			
Reissue	300	150	500	25	60	0 300			
Provisional	200	100	0	()	0 0			
2. EXCESS CLAIM FEES	s						Small Entity		
Fee Description						Fee (\$)	Fee (\$)		
Each claim over 20 (incl	uding Reiss	sues)				50	25		
Each independent claim over 3 (including Reissues) 200 100									
Multiple dependent claims 360 180									
<u>Total Claims</u> <u>Extra Claims</u> <u>Fee (\$)</u>			Fee (\$)	Fee Pai	<u>d (\$)</u> <u>Multi</u>	iple Dependent Claims			
20 o		x	=		<u>F</u>	ee (\$)	Fee Paid (\$)		
HP = highest number of total claims paid for, if greater than 20									
<u>Indep. Claims</u> 3 or	_	<u>ktra Claims</u> x	<u>Fee (\$)</u> =	<u>Fee Pai</u>	<u>d (\$)</u>				
HP = highest number of	of independ	ent claims paid for	, if greater th	an 3					
3. APPLICATION SIZE F	EE								
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$) 100 = / 50 = (round up to a whole number) x =									
4. OTHER FEE(S)									
Non-English Specification, \$130 fee (no small entity discount)									
Other (e.g., late filing surcharge): INFORMATION DISCLOSURE STATEMENT \$180.00									
SUBMITTED BY									
Signature Registration No. (Attorney/Agent) 53,078 Telephone (713) 238-8000							3) 238-8000		
	100			, , ,		 	1110 2005		

Name (Print/Type) April 18, 2005 Date

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Daxiang Wang, et al.

Group Art Unit:

1621

Serial No.:

10/822,528

\$ \$ \$ \$ \$ \$ \$ \$ Examiner:

Jafar F. Parsa

Filed:

April 12, 2004

Atty. Docket No.:

1856-17802

For:

Selective Removal Of Oxygen

Client Ref. No.:

9407-A-01

From Syngas

INFORMATION DISCLOSURE STATEMENT

Atty. Dkt. No.: 1856-17802 (9407.A-01)

Date: April 18, 2005

Mail Stop Amendment Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement, including completed Form PTO-1449, comprises a list of pertinent art of which Applicants are aware.

The submission of this Information Disclosure Statement and the references submitted therewith is not an admission that the art cited is "prior" with respect to the present invention, nor is it a representation, that no better art exists. Applicants hereby reserve the right to swear behind or otherwise disprove any alleged "prior" nature of any art cited should the facts support and the situation warrant such an action. It is submitted that the art cited does not constitute a bar to the patentability of Applicants' invention under 35 U.S.C. § 102 or § 103.

Consideration of the following related applications and additional information (including any relevant co-pending or abandoned U.S. applications, prior uses and/or sales, etc.) is requested: Application Serial No. 60/353,822 filed on January 31, 2002, entitled Oxygen Selective Membrane To Remove Oxygen From Syngas, 60/353,774 filed on March 12, 2002, entitled Oxygen Selective Membrane To Remove Oxygen From Syngas and Application Serial No. 10/219,108 filed on August 15, 2002, entitled Selective Removal of Oxygen From Syngas.

Pursuant to 37 C.F.R. § 1.98 (d), copies of certain publications, or other information, as specified in 37 C.F.R. § 1.98 (a), listed in the attached Form PTO-1449 are not provided herewith, as they have been previously submitted to, or cited by, the Office in the above-mentioned earlier U.S. Patent Application(s). The Information Disclosure Statement filed in the earlier application(s) complies with 37 C.F.R. § 1.98 (a)-(c).

Because an Office Action has been entered in this case, this Information Disclosure Statement is being filed under C.F.R. 1.97(c). Applicant hereby authorizes the Commissioner to charge Deposit Account 03-2769 of Conley Rose, P.C. the amount of \$180 so that this Information Disclosure Statement may be considered.

Respectfully submitted,

Jeffrey L. Johnson Reg. No. 53,078

CONLEY ROSE, P.C.

P. O. Box 3267

Houston, Texas 77253-3267

(713) 238-8000

ATTORNEY/AGENT FOR APPLICANT

Atty. Docket No. Form PTO-1449 (Modified) Serial No. INFORMATION DISCLOSURE STATEMENT BY APPLICANT 1856-17802 10/822,528 (9407.A-01) (Use several sheets if hecessary) Applicant APR 2 0 2005 Daxiang Wang et al. Filing Date Group April 12, 2004 1621 REFERENCE DESIGNATION U.S. PAPENT DOCUMENTS DOCUMENT DATE NAME **CLASS** SUB-FILING DATE IF **EXAMINER** NUMBER CLASS APPROPRIATE INITIAL 195 28 AA 3,996,105 12/07/1976 Harrison et al. 4,269,940 05/26/1981 435 148 AΒ Patel et al. AC 4,318,784 03/09/1982 Higgins et al. 204 73 AD 4,587,216 05/06/1986 Patel et al. 435 123 4,827,043 05/02/1989 568 492 AE Butler 07/07/1992 184 AF 5,128,060 252 Ueno et al. 435 155 AG 5,192,672 03/09/1993 Lipscomb AΗ 5,453,211 09/26/1995 Alward 252 45 02/03/1998 266 ΑI 5,714,379 Phipps, Jr. 435 ΑJ 5,730,003 03/24/1998 62 648 Nguyen et al. 5,958,757 09/28/1999 435 262.5 ΑK Steffan et al. 5,985,649 11/19/1999 435 266 AL Stensel et al. Phillips et al. 6,019,810 02/01/2000 55 512 AM 715 03/28/2000 518 6,043,288 DeGeorge et al. ΑN 702 ΑO 6,103,773 08/15/2000 Wittenbrink et al. 518 ΑP 11/14/2000 518 715 6,147,126 DeGeorge et al. ΑO 6,169,120 01/02/2001 518 715 Beer 35.2 6,254,946 07/03/2001 428 AR Hirata et al. 08/21/2001 AS 6,277,338 Agee et al. 422 189 6,369,148 04/09/2002 417 ΑТ Chiang et al. 524 OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) AU Structured Catalysts and Reactors, A. Cyulski and J.A. Moulijn (eds.), Marcel Dekker Inc., 1998 (p. 599-615) ΑV U. Balachandran et al., Dense Ceramic Membranes for Partial Oxidation of Methane to Syngas, Applied Catalysis A: General 133, 1995 (p. 19-29) ΑW Jonghee Han et al., Oxygen Permeation Through Flourite-Type-Bismuth-Yttrium-Copper Oxide Membranes, Journal of Membrane Science, 132 (1997) p. 235-243 H.J.M. Bouwmeester et al., Oxygen Semipermeability of Erbia-Stabilized Bismuth Oxide, Solid State Ionic, 53-56 (1992) p. 460-AX Shenglin Liu et al., Effects of Alkali and Rate Earth Metal Oxides on the Thermal Stability and the Carbon-Deposition over Nickel AY Based Catalyst, Study of Surface Science and Catalyst, 119 (1998) p. 747-52 Chung-Yi Tsai et al., Dense Perovskite, La_{1-x}A_xFe_{1-y}Co_yO₃₋₈ (A=Ba,Sr,Ca), Membrane Synthesis, Applications and ΑZ Characterization, J. Am. Ceram. Soc. 81 [6] p. 1437-1444 (1998) BA L.M. van der Haar et al., Homogeneous Porous Perovskite Supports for Thin Dense Oxygen Separation Membranes, Journal of Membrane Science, 180 (2000) p. 147-155 BB Schulz et al., Applied Catalyst Volume 186 Nos. 1,2 October 1999 (229 p). **EXAMINER** DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				Atty. Docket No. 1856-17802 (9407-A-01)		Serial No. 10/822,528			
					Applicant Daxiang Wang et al.				
						Filing Date April 12, 2004		Group 1621	
REFERENCE I	DESIGNATION	U.S. PATENT DO	CUMENTS						
EXAMINER INITIAL		DOCUMENT NUMBER	DATE		NAME	CLASS	SUB- CLASS	FILING I APPROP	
	ВС	3,812,035	05/21/1974		Krenowicz et al.	252	59		
	BD	4,800,189	01/24/1989		Eschwey et al.	502	400		
	BE	5,446,232	08/29/1995		Chen et al.	585	845	02/14/1994	
	BF	5,484,580	01/16/1996		Sharma	423	219	01/19/1994	
	BG	5,607,572	03/04/1997		Joshi	205	763	03/21/1995	
e (8)	ВН	6,025,305	02/15/2000		Aldrich et al.	508	110	08/04/1998	
	BI	6,287,653	09/11/2001		Speer et al.	428	35.4	03/05/1999	
	BJ	6,351,971	03/05/2002		Nguyen et al.	62	648	12/29/2000	
	BK	6,376,434	04/23/2002		Katafuchi	508	291	10/23/1997	
FOREIGN PAT	ENT DOCUM	ENTS							
		DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUB- CLASS	Translation	
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OTHER ART (I	ncluding Autho	or, Title, Date, Pert	inent Pages, I	Etc.)					
	DI.	Guoxing Xiong, Hui Dong, Zongping Shao, Jianhua Tong, Shishan Sheng, Weishen Yang, International Conference on Catalytic							
	BL Membrane Reactors-2000, 25-26								
					<u> </u>	 -			
EXAMINER			DATE CONSIDERED						
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.									